Title (en)

A MECHANICAL ASSEMBLY FOR A POWER TOOL

Title (de)

MECHANISCHE ANORDNUNG FÜR EINE WERKZEUGMASCHINE

Title (fr)

ENSEMBLE MÉCANIQUE DESTINÉ À UNE MACHINE-OUTIL

Publication

EP 2200772 A4 20110427 (EN)

Application

EP 08799977 A 20080905

Priority

- AU 2008001325 W 20080905
- AU 2007904849 A 20070906

Abstract (en)

[origin: WO2009029997A1] The invention relates to a mechanical assembly for a power tool, and a power tool incorporating the mechanical assembly. The mechanical assembly includes a first member having a first axis and a first engagement portion inclined relative to the first axis and a second member having a second axis and a second engagement portion inclined relative to the second axis. The first and second engagement portions engage each other by movement of the first and second members relative to each other in the direction of at least one of the axes. The power tool includes a power tool body and a rotatable driven member being operable for releasably gripping a working element, the driven member having a drive mode in which rotation of the driven member drives the working element relative to the power tool body and an adjustment mode in which rotation of the driven member causes the driven member to either grip the working element or release the working element or both. The power tool also includes means for adjusting the driven member between the modes which includes the mechanical assembly wherein the first and second engagement portions engage each other by movement of the first and second members relative to each other in the direction of at least one of the axes and wherein engagement between the first and second engagement portions adjusts the driven member to the adjustment mode and disengagement between the first and second engagement portions adjusts the driven member to the drive mode. The power tool may also include a first torque control means that is operable for controlling the amount of torque applied to the driven member by the power drive when in the drive mode and a second torque control means that is operable for controlling the amount of torque applied to the driven member by the power drive when in the adjustment mode. The power tool may further include a gearbox with one or more speeds and a switch with two or more positions that is operable for selecting the modes, the gear speeds and the first and second torque control means.

IPC 8 full level

B23B 31/00 (2006.01); **B25D 1/00** (2006.01); **B27B 1/00** (2006.01); **B27C 9/00** (2006.01)

CPC (source: EP US)

B23B 31/1238 (2013.01 - EP US); **B23B 31/24** (2013.01 - US); **B23B 45/008** (2013.01 - EP US); **B25F 5/001** (2013.01 - EP US); **B27B 5/32** (2013.01 - EP US); **F16D 11/14** (2013.01 - US); B23B 2231/38 (2013.01 - US); Y10T 74/19242 (2015.01 - EP US); Y10T 74/19614 (2015.01 - EP US); Y10T 74/19688 (2015.01 - EP US); Y10T 74/2014 (2015.01 - EP US); Y10T 279/17 (2015.01 - EP US); Y10T 279/17615 (2015.01 - EP US); Y10T 279/17623 (2015.01 - EP US); Y10T 279/17632 (2015.01 - EP US); Y10T 408/94 (2015.01 - EP US)

Citation (search report)

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- [X] WO 8911368 A1 19891130 - MILWAUKEE ELECTRIC TOOL CORP [US]
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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009029997 A1 20090312; CA 2697523 A1 20090312; CN 101918163 A 20101215; CN 103121205 A 20130529; CN 103121205 B 20150902; EP 2200772 A1 20100630; EP 2200772 A4 20110427; US 2010200257 A1 20100812; US 2013180745 A1 20130718; US 2014216774 A1 20140807; US 8387719 B2 20130305

DOCDB simple family (application)

AU 2008001325 W 20080905; CA 2697523 A 20080905; CN 200880114989 A 20080905; CN 201210434188 A 20080905; EP 08799977 A 20080905; US 201313783811 A 20130304; US 201314062952 A 20131025; US 67655908 A 20080905